

IN THE UNITED STATES DESIGNATED OFFICE

09/403072

Applicants	Ronny Knepple, <i>et al.</i>
International Application No. PCT/EP99/00943	International Filing Date February 12, 1999
Title of Application	Method For Labeling Sample Containers

BOX PCT, ATTENTION DO/US  
Assistant Commissioner for Patents  
Washington, DC 20231

***Transmittal Letter to the U.S. Designated Office (DO/US)  
Entry into the U.S. National Stage Under Chapter I***

1. Applicant herewith submits to the United States Designated Office (DO/US) the following items under 35 U.S.C. 371.

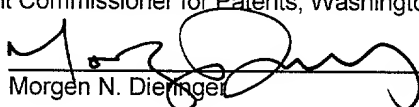
This is an express request to immediately begin national examination procedures (35 U.S.C. 371(f)).

2. A copy of the International Application as filed (35 U.S.C. 371(c)(2)):

- ☐ is transmitted herewith.  
☐ is not required as the application was filed with the U.S. Receiving Office.  
☒ has been transmitted by the International Bureau. The date of mailing of the application (from form PCT/IB/308) was ---.  
☐ has been transmitted by applicant on ---.

Express Mail Certificate: I hereby certify that this correspondence is today being deposited with the U.S. Postal Service as *Express Mail Post Office to Addressee* Mailing Label Number EM387358450US in an envelope addressed to: Assistant Commissioner for Patents; Washington, DC 20231.

October 13, 1999

  
Morgen N. Dieminger

3. The U.S. National Fee (35 U.S.C. 371(C)(1)) and other fees (37 CFR) are indicated below:

Claims Fees			
Claims Fee - Number Filed	No. Extra	Rate	Calculation
Total Claims 9 minus 20	= 0	@ \$ 18	0.00
Independent Claims: 1 minus 3	= 0	@ \$ 78	0.00
Multiple Dependent Claims (if applicable)	= 0	@ \$260	0.00
<b>Basic Fee</b> - The International Search Fee, as set forth in Section 1.445(a)(2) to be paid to the US PTO acting as an International Searching Authority:	has been paid (37 CFR 1.492(a)(2) .....	@\$760	0.00
	has not been paid (37 CFR (1.492(a)(3) .....	@\$970	0.00
	where a search report on the international has been prepared by EPO or JOP .....	@\$840	840.00
Total of above Calculations			\$0.00
<b>Small Entity</b> - Reduction by half for filing by a Small Entity			0.00
Subtotal			840.00
Total National Fee			\$840.00
Recording Assignment fee			0.00
<b>TOTAL</b>			<b>Total Fees enclosed</b> \$840.00

- \* See attached Preliminary Amendment Reducing the Number of Claims.
- i. A check in the amount of \$840.00 to cover the above fees is enclosed.
- ii. **Authorization to Charge Additional Fees.** The Commissioner is hereby authorized to charge any additional fees by this paper and during the entire pendency of this Application to Account No. 19-4516.

*Warning: If the translations of the international application, oath or declaration and national fee have not been submitted by the applicant within twenty (20) months from the priority date, the applicant will be so notified and given a period of time within which to file the translation and/or oath or declaration in order to prevent abandonment. The payment of the surcharge set forth in § 1.492(e) is required as a condition for accepting the oath or declaration later than twenty (20) months after the priority date. The payment of the processing fee set forth in § 1.492(f) is required for acceptance of an English translation later than twenty (20) months after the priority date. Failure to comply with these requirements will result in abandonment of the application. The provisions of § 1.136 will apply 37 CFR § 1494(c); Notice of January 7, 1993, 1147 O.G. 29 to 40, at et.*

4. A translation of the International Application into the English language (35 U.S.C. 371(C)(2)):

- ☒ is transmitted herewith.
- ☐ is not required as the application as the application was filed in English.
- ☐ was previously transmitted by applicant on ---.

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5. Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)):

- ☐ are transmitted herewith.
- ☐ have been transmitted
- ☐ by the International Bureau. The date of mailing of the amendment (from form PCT/IB/308) is ---.
- ☐ by applicant on ---.
- ☒ have not been transmitted, as
- ☐ no notification has been received that the International Search Authority has received the Search Copy.
- ☐ the Search Copy was received by the International Searching Authority, but the Search Report has not yet been issued. The date of the receipt of Search Copy (from form PCT/ISA/202) is ---.
- ☒ applicant chose not to make amendments under PCT Article 19.
- ☐ the time limit for the submission of amendments has not yet expired. The amendment, or a statement that amendments have not been made, will be transmitted before the expiration of the time limit under PCT Rule 16.1.

6. A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)):

- ☐ is transmitted herewith.
- ☐ is not required as the application as the application was filed in English.
- ☒ has not been transmitted for reasons indicated at point 5 above.

7. An oath or declaration of the inventor [35 U.S.C. 371 (c)(4)] complying with 35 U.S.C. 115

- ☐ was previously submitted by applicant on ---.
- ☐ is attached to the application.
- ☐ identifies the application and any amendments under PCT Article 19 which were transmitted as stated in points 3.b. or c. and 5.b; and states that they were reviewed by the inventor as required by 37 CFR 1.70.
- ☒ will follow.

8. An International Search Report (Form PCT/ISA/210) or Declaration under PCT Article 17(2)(a):

- ☐ is transmitted herewith.
- ☐ has been transmitted by the International Bureau. The date of mailing (from form PCT/IB/308) is ---.
- ☐ is not required, as the application was searched by the United States International Searching Authority.
- ☒ will be transmitted promptly upon request.
- ☐ is not transmitted, as the International Search has not yet issued.

9. An Information Disclosure Statement under 37 CFR 1.97 and 1.98:

- ☐ is transmitted herewith.  
☒ will be transmitted within three months of the date of submission of requirements under 35 U.S.C. 371(c).  
☐ was previously submitted by applicant on ---.

Also transmitted herewith is/are:

- ☐ form PTO-1449.  
☐ copies of citations listed.

10. Additional documents:

- ☒ Copy of Request (PCT/RO/101).  
☒ International Publication No. WO 99/41014, Front page only.  
☒ Preliminary Amendment (37 CFR § 1.121)

11. An Assignment document

- ☐ Is transmitted herewith for recording.  
☐ A separate Cover Sheet for Assignment (Document) accompanying New Patent Application is attached; or  
☐ Form PTO-1595 is attached.  
☒ Will follow.


Please mail the recorded assignment document to the person whose signature and address appear below.

12. The above-checked items are being transmitted

- ☐ before the 18th month publication.  
☒ after publication and the article 20 communication, but before 20 months from the priority date.  
☐ after 20 months (revival). *Note: Petition to revive (37 CFR 1.137(a) or (b)) is necessary if 35 U.S.C. 371 requirements are submitted after 20 months.*

Respectfully submitted,

13 October 1999

  
\_\_\_\_\_  
Wesley W. Whitmyer, Jr., Registration No. 33,558  
James R. Cartiglia, Registration No. 30,738  
Attorneys for Applicants  
ST.ONGE STEWARD JOHNSTON & REENS LLC  
986 Bedford Street  
Stamford, CT 06905-5619  
(203) 324-6155

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PATENT

03143-P0082A WWW/JRC

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants	Ronny Knepple, <i>et al.</i>
Serial No. - Pending	Filing Date: October 13, 1999
Title of Application	Method For Labelling Sample Containers

Assistant Commissioner for Patents  
Washington, DC 20231

**Preliminary Amendment**

Dear Sir:

Please examine the following amendment before calculating the filing fee for this case.

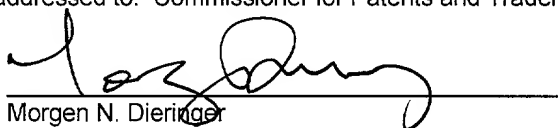
In the Claims

Please amend the claims as follows:

3. (Amended) A method as claimed in Claim 1 [or 2], characterized in that the identification is applied [through ink jet] by a printer [methods in single and/or multi-color by means of] with [ink(s)] ink.
4. (Amended) A method as claimed in Claim 3, characterized in that [at least an] the ink [is applied that] can be read by means of UV light.
5. A method as claimed in [one of Claims 1 to 4] Claim 1, characterized in that the identification is applied in the form of a bar code.

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October 13, 1999

  
Morgen N. Dieringer

6. (Amended) A method as claimed in [one of Claim 1 to 5] Claim 5, characterized in that the bar code is applied annularly onto a cylindrical portion of the sample container in a manner that it is readable along the cylindrical axis.
7. (Amended) A method as claimed in [one of Claims 1 to 6] Claim 1, characterized in that the identification is applied along with numerals and/or letters.
8. (Amended) A method as claimed in [one of Claims 1 to 4] Claim 1, characterized in that the identification is applied in the form of numerals and/or letters.

**Remarks**

The revised claims are substantially the same as those in the application as filed.

The amendments eliminate multiple dependencies and alternative expressions, correct antecedent basis, eliminate unnecessary limitations, and otherwise conform the claims to U.S. Practice.

Respectfully submitted,



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Wesley W. Whitmyer, Jr., Registration No. 33,558  
James R. Cartiglia, Registration No. 30,738  
Attorneys for Applicants  
ST.ONGE STEWARD JOHNSTON & REENS LLC  
986 Bedford Street  
Stamford, CT 06905-5619  
203 324-6155

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### A method of identifying sample containers

The present invention refers to a method of identifying sample containers for an analysis device, in which the sample containers can be heated to a temperature, having an automatically readable identification.

The identification of sample containers serves for clearly identifying the sample to be analyzed so that the analysis results can be clearly allocated to the sample and incorrect allocations are avoided, in particular when a plurality of similar sample containers are used. A plurality of methods of identifying samples are known, which are used in accordance with the application purpose of the sample container.

In the simplest case, the sample container is marked by hand, for instance by a felt pen (e.g. a waterproof pen). If analysis devices having a read unit for automatically reading sample identifications are used, the hand-written identification can generally not be automatically read by the read unit. A measuring protocol provided with an identification therefore usually requires the manual input of the identification into an input unit of the analysis device. This requires more work with the risk of incorrect allocation when the identification is incorrectly input.

A further possible allocation of the sample container may for instance be performed indirectly through a position number of the sample container in a magazine. This disadvantage is that a clear identification of the sample container is not detected automatically and therefore a manual allocation of the sample container and the position number is required. Incorrect allocations between the sample (sample container) and the position number may occur, in particular when a plurality of magazine charges are to be analyzed.

In analysis devices having a read unit for reading sample container identifications, as e.g. a bar code, a clear allocation of the sample container identification and the analysis results is performed as schematically shown in Fig. 1.

The sample container 1 is provided by the user with a machine-readable code 2, which is for instance printed onto an identification label. The identification may for instance be generated by means of a computer 3 by a printer (encoding means) 4 and may be adhered onto the sample container 1. The sample container 1 is identified (decoded) in the analysis device 5, wherein the identification along with the measuring results is handed back to the computer. As an alternative to the adhesive label, the identification can also be printed directly onto the sample container, wherein, however, each user requires a special identification unit (encoding means 4) instead of a conventional printer, which allows the marking of sample containers. An identification unit of that kind usually causes clearly higher costs of purchase and can be used for a specific purpose only. When using adhesive labels, disadvantages may result with respect to the constructional tolerances of the sample containers, since the adhesive label changes the dimensions of the sample container which is provided with a label. In the head space gas-chromatography, the sample container is heated up to a temperature of approximately 300°C, wherein the thermostatzation of the sample container is performed in a small opening with very narrow tolerances within a heating block. Thus, an identification by adhesive labels cannot be performed. Furthermore, the adhesives of the adhesive labels have a temperature stability insufficient for this application. The attachment of the identification by hand is also often not practicable, since in case of precision measurements the sample containers should not be touched after a cleaning process in order to avoid impurification and therefore a falsification of the analysis results.

A further decisive disadvantage of the methods described so far is that constituents of the identification ink or constituents of the adhesive of the adhesive label or of the label contaminate the substance analyzed during measurement, in particular when the

sample containers and samples are severely heated as in head space gas-chromatography (e.g. to 300°C).

It is the object of the present invention to eliminate the above-mentioned disadvantages and to provide an improved method of identifying sample containers.

This object is solved by the invention in that during the manufacturing process of the sample container, the identification is applied during the final cooling phase of the ready sample container in a temperature interval between a maximum temperature during sample container manufacture and the operating temperature of the sample container in the analysis device.

The method according to the invention leads to significant advantages for the user, since the application of the identification (e.g. an encoding) on the sample container becomes superfluous, which saves for instance the use of identification units. Thus, the costs of the analysis process are generally lowered, since the number of working steps for the analysis and possible sources of error during sample identification are reduced.

Since the identification during a temperature interval between a maximum temperature occurring during the sample manufacture and the operating temperature of the sample container is performed in the analysis device, the advantage results that the marking agents (e.g. ink) during identification of the sample container are heated to a temperature higher than the operating temperature, wherein the volatile constituents of the marking agent evaporate already during the manufacturing process and the identification does not contaminate the sample by de-gassing constituents during the analysis process due to this heating. This is in particular significant in the application of sample containers in the head space gas-chromatography, since the identification together with the sample container is exposed to high temperatures, wherein the sensitivity of this analysis method is very high so that even the slightest impurification of the sample by the identification agent would be harmful. In addition, the sample

containers do not need to be touched after a possible cleaning procedure in order to apply an identification, thus further reducing the risk of an impurification of the sample container and therefore a contamination of the samples.

The increased temperature of the sample container when applying the identification advantageously results in an "abrasion-resistant" identification, since the marking agent burns into the surface of the sample container, which may for instance consist of glass, and therefore better adheres to the surface of the sample container. Thus, the marking agent may more favorably bond with the surface of the sample container, wherein the connection may be performed both chemically and physically (e.g. by means of adsorption, fusion or diffusion).

Since the identification is applied during the final cooling phase of the sample container manufacture, the additional advantage results that the sample container must not be heated for applying the identification in order to include the above-described advantages of such an identification. This significantly reduces the costs of the identification method due to the reduced number of method steps and due to the saving of energy.

Since the identification is already performed at the manufacturer side, the possibility advantageously results to attach the identification in the form of continual series numbers (encoded and/or not encoded) so that the sample containers can be clearly identified worldwide. Additionally, there is the advantageous possibility of including information into the identification, such as the manufacturing date of the sample container, the materials used, the purpose, size etc.

The identification is preferably applied at temperatures between 300°C and 600°C, which is why the sample containers identified in this manner are especially suitable for the head space gas-chromatography in which the sample containers are heated to up to

300°C. This ensures, as described above, that the marking agents do not contaminate the sample in the sample container during the analysis, e.g. by de-gassing.

The identification of the sample container is preferably applied by means of an ink jet printing method of the known ink jet printing technology, in which the single-colored or multi-colored identification is printed onto a surface of the sample container by means of appropriate inks.

Furthermore, special inks can also be used which reveal the identification only by UV illumination, wherein the fluorescent wavelength area of the ink may for instance be adapted to the spectral sensitivity of the read device. The application of the identification by means of the ink jet printing method has the advantage, besides the above-mentioned advantages, that the dimensional accuracy is not influenced by the identification. Thus, sample containers identified in this manner also fulfill the geometric tolerance demands for the use in head space gas chromatographs. An additional advantage of the ink jet print technology results from the contact-less application of the identification, by which the sample containers do not need to be further treated before and after the identification process.

The identification is preferably applied in the form of a bar code, e.g. annularly, onto a cylindrical portion of the sample container. If the code is arranged in a manner that it is readable along the cylindrical axis, this code can reliably be read irrespective of the position angle of the sample container by a read device arranged perpendicular to the cylindrical axis. The code may, however, also be arranged at any other different angle to the cylindrical axis.

The identification of the sample container advantageously comprises besides a code (e.g. a bar code) also numerals and texts, which may correspond to the encoded information of the identification. Thereby, the identification can advantageously be read

also without the decoded read means, and enables a direct control by the operating personnel of the analysis device.

The read device for reading the identification of the sample container may consist of a decoder device, e.g. a device for reading a bar code, it may, however, also comprise different image and pattern detection devices and methods. The identification may for instance be detected by scanners or video cameras and may be processed in a computer by means of pattern detection algorithms. By the application of such image or pattern detection methods, the encoding of the identification can be renounced and the identification can be applied directly onto the sample container in the form of numerals and/or letters. Furthermore, symbols (e.g. a company logo) can be applied together with the identification by the method according to the invention.

The invention shall now be described by means of an embodiment and the enclosed drawings.

Fig. 1 is a known identification method for sample containers, and

Fig. 2 is an example of an identification method according to the invention with an application for the sample identification in an analysis device.

Fig. 1 shows, as described above, a known identification device for sample containers. Fig. 2 shows an example of an identification method according to the invention. The sample containers 10 (in the special example consisting of glass) are provided with an identification 12 already when producing the sample container (manufacture of glass) 10a. The sample container 10 may generally also consist of plastics, ceramics or metal. In the example shown, a bar code 12 is annularly applied by means of an encoding device 14 onto the glass sample container 10 around its cylindrical portion during its final cooling phase so that this code is readable along the cylindrical axis. The bar code 12 is for instance sprayed onto the container by ink in a contact-less manner via an ink

jet printer. The identification can, however, also be applied by means of mechanical action, e.g. by scratching or grinding, or for instance by means of laser beams or by vapor deposition. The optical properties of the sample container 10, such as the refractive index or the reflective ability as well as the material thickness of the sample material envelope may be manipulated by the identification process in order to indicate the information content of the identification.

The user of the sample container may read and decode 13a the identification by means of a read unit, as for instance a scanner, and provide the information of the identification in a computer 13 and for instance assign it to an application-specific identification. Then (see arrow 15a), the identified sample container 10 with the sample reaches the analysis device 15, in which the sample is analyzed. During the analysis, the identified sample container 10 is also identified by a read unit by means of its identification, and the analysis date is transmitted (15b) along with the identification to the computer 13. In the computer 13 the measured data can then be further processed in consideration of the identification. The encoding of glass sample containers for the head space gas-chromatography basically consists of a compact (maximum of 30 mm long) annular code (e.g. 2 from 5) which can be measured in the axial direction of the sample container, wherein for instance black ink is sprayed onto a deadened glass surface of the sample container. As an alternative, the code can also be applied by a plurality of colors, for instance by alternately spraying black and white ink onto the glass surface of the sample container by the aid of the ink jet printing method. The temperature of the sample container is preferably approximately 500°C during the identification. The above-described annular bar code is advantageously annularly readable by means of a scanner or read unit, irrespective of the position of the sample container to the read unit. As an alternative to the contact-less optical reading of the identification, this identification, when applied correctly, can also be read by mechanical scanning by means of read pens or it may be performed by the determination of the dielectric or magnetic properties of the identification of the sample container.

In the embodiment shown, a preferably eight or nine-digit numeric bar code is used by which approximately hundred million or a billion of different identifications result. By this numeric code, the sample containers can be clearly identified worldwide at continual numeration.

## Claims

1. A method of providing sample containers with an automatically readable identification for an analysis device, in which the sample container may be heated to an operating temperature, characterized in that in the manufacturing process of the sample container, the identification during the final cooling phase of the ready sample container is applied in a temperature interval between a maximum temperature during the sample container manufacture and the operating temperature.
2. A method as claimed in claim 1, characterized in that the temperature interval is between 300°C and 600°C.
3. A method as claimed in claim 1 or 2, characterized in that the identification is applied through ink jet printer methods in single and/or multi-color by means of ink(s).
4. A method as claimed in claim 3, characterized in that at least an ink is applied that can be read by means of UV light.
5. A method as claimed in one of claims 1 to 4, characterized in that the identification is applied in the form of a bar code.
6. A method as claimed in one of claims 1 to 5, characterized in that the bar code is applied annularly onto cylindrical portion of the sample container in a manner that it is readable along the cylindrical axis.
7. A method as claimed in one of claims 1 to 6, characterized in that the identification is applied along with numerals and/or letters.



## **Abstract**

### **Identification of sample containers**

The invention refers to a method of providing sample containers with an automatically readable identification for an analysis device, in which the sample container may be heated to an operating temperature. It is the object of the invention to improve the identification of sample containers in a manner that the sample contained in the sample container is not contaminated by the constituents of the identification agent during analysis. The object of the invention is solved in that during the manufacturing process of the sample container, the identification is applied during the final cooling phase of the ready sample container in a temperature interval between a maximum temperature during the sample container manufacture and the operating temperature. By the method according to the invention, volatile constituents of the identification agent are advantageous evaporated during the manufacturing process, so that when using the sample container during operating temperature of the analysis device, the sample to be analyzed is no longer contaminated by the exhaling constituents of the identification agent.

### The Drawings:

Fig. 1:

Verarbeitung: processing

Codierung: encoding

Codiereinrichtung: encoding means

Decodierung: decoding

Instrument: instrument

Fig. 2

Beim Glashersteller: at the glass manufacturer

Codierung: encoding

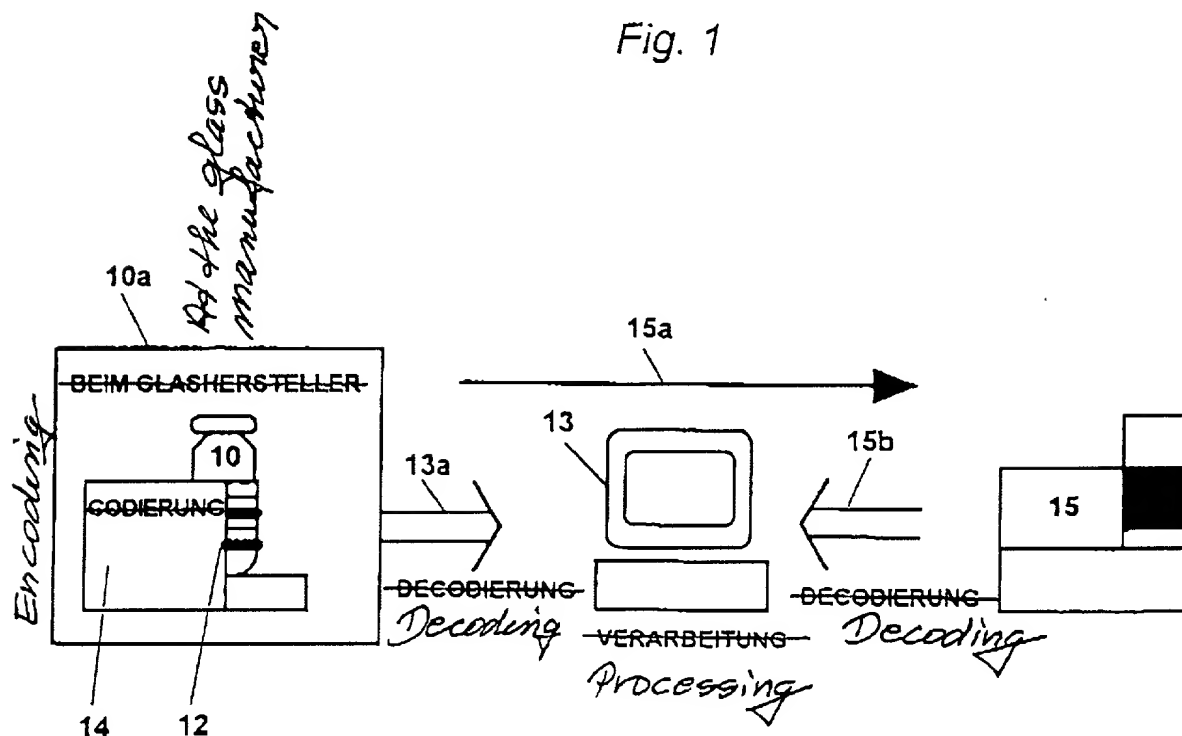
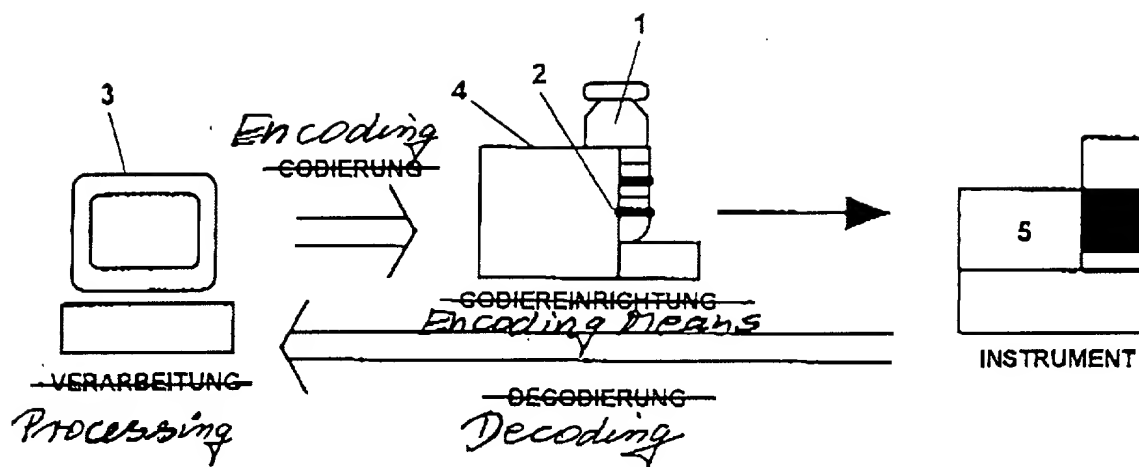
Decodierung: decoding

Verarbeitung: processing

Decodierung: decoding

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1/1





# Declaration and Power of Attorney for Patent Application Erklärung für Patentanmeldungen mit Vollmacht

## German Language Declaration

Als nachstehend benannter Erfinder erkläre ich hiermit an Eides Statt:

daß mein Wohnsitz, meine Postanschrift und meine Staatsangehörigkeit den im nachstehenden nach meinem Namen aufgeführten Angaben entsprechen, daß ich nach bestem Wissen der ursprüngliche, erste und alleinige Erfinder (falls nachstehend nur ein Name angegeben ist) oder ein ursprünglicher, erster und Miterfinder (falls nachstehend mehrere Namen aufgeführt sind) des Gegenstandes bin, für den dieser Antrag gestellt wird und für den ein patent für die Erfindung mit folgendem Titel beantragt wird:

### Method For Labeling Sample Containers

deren Beschreibung hier beigelegt ist, es sei denn (in diesem Falle Zutreffendes bitte ankreuzen), diese Erfindung

☐ wurde angemeldet am **October 13, 1999** unter der US-Anmeldenummer oder unter der Internationalen Anmeldenummer im Rahmen des Vertrags über die Zusammenarbeit auf dem Gebiet des Patenwesens (PCT) **09/403,072** und am \_\_\_\_\_ abgeändert (falls zutreffend).

Ich bestätige hiermit, daß ich den Inhalt der oben angegebenen Patentanmeldung, einschließlich der Ansprüche, die eventuell durch einen oben erwähnten Zusatzantrag abgeändert wurde, durchgesehen und verstanden habe.

Ich erkenne meine Pflicht zur Offenbarung jeglicher Informationen an, die zur Prüfung der Patentfähigkeit in Einklang mit Titel 37, Code of Federal Regulations, § 1.56 von Belang sind.

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated next to my name

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

### Method For Labeling Sample Containers

the specification of which is attached hereto unless the following box is checked:

☐ was filed on **October 13, 1999** as United States Application Number or PCT International Application Number **09/403,072** and was amended on \_\_\_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

[Page 1 of 3]

Burden Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORM TO THIS ADDRESS. SEND TO: Commissioner of Patents and Trademarks, Washington, DC 20231.

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### German Language Declaration

Ich beanspruche hiermit ausländische Prioritätsvorteile gemäß Title 35, US-Code, § 119 (a)-(d), bzw. § 365 (b) aller unten aufgeführten Auslandsanmeldungen für Patente oder Erfinderurkunden, oder § 365(a) aller PCT internationalen Anmeldungen, welche wenigstens ein Land ausser den Vereinigten Staaten von Amerika benennen, und habe nachstehend durch ankreuzen sämtliche Auslandsanmeldungen für Patente bzw. Erfinderurkunden oder PCT internationale Anmeldungen angegeben, deren Anmeldetag dem der Anmeldung, für welche Priorität beansprucht wird, vorangeht.

Prior Foreign Applications  
(Frühere ausländische Anmeldungen)

198 06 049.1

(Number)

(Nummer)

(Number)

(Nummer)

Germany

(Country)

(Land)

(Country)

(Land)



I hereby claim foreign priority under Title 35, United States Code, § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

Priority Not Claimed  
Priorität nicht beansprucht

13 February 1998

(Day/Month/Year Filed)

(Tag/Monat/Jahr der Anmeldung)

(Day/Month/Year Filed)

(Tag/Monat/Jahr der Anmeldung)

Ich beanspruche hiermit Prioritätsvorteile unter Title 35, US-Code, § 119(e) aller US-Hilfsanmeldungen wie unten aufgezählt.

(Application No.)

(Aktenzeichen)

(Filing Date)

(Anmeldetag)

(Application No.)

(Aktenzeichen)

(Filing Date)

(Anmeldetag)

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(Application No.)

(Aktenzeichen)

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(Application No.)

(Aktenzeichen)

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Ich erkläre hiermit, daß alle in der vorliegenden Erklärung von mir gemachten Angaben nach bestem Wissen und Gewissen der Wahrheit entsprechen, und ferner, daß ich diese eidesstattliche Erklärung in Kenntnis dessen ablege, daß wissentlich und vorsätzlich falsche Angaben oder dergleichen gemäß § 1001, Title 18 des US-Code strafbar sind und mit Geldstrafe und/oder Gefängnis bestraft werden können und daß derartige wissentlich und vorsätzlich falsche Angaben die Rechtswirksamkeit der vorliegenden Patentanmeldung oder eines aufgrund deren erteilten Patentes gefährden können.

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

**German Language Declaration**

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**POWER OF ATTORNEY:** As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the patent and Trademark Office connected therewith: (list name and registration number)

**Wesley W. Whitmyer, Jr., Registration No. 33,558**

**Wesley W. Whitmyer, Jr., Registration No. 33,558**

Postanschrift:

Send Correspondence to:

**Wesley W. Whitmyer, Jr.**

**Wesley W. Whitmyer, Jr.**

**ST. ONGE STEWARD JOHNSTON & REENS LLC**

**ST. ONGE STEWARD JOHNSTON & REENS LLC**

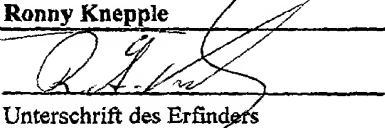
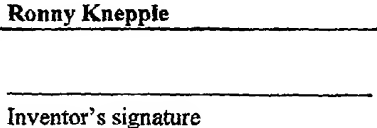
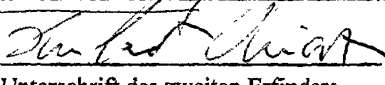
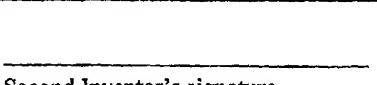
**986 Bedford Street; Stamford, CT 06905-5619**

**986 Bedford Street; Stamford, CT 06905-5619**

Telefonische Auskünfte: (Name und Telefonnummer)

Direct Telephone Calls to (name and phone number)

**Wesley W. Whitmyer, Jr., Telephone 203 324-6155**

<b>Vor- und Zuname des einzigen oder ersten Erfinders</b> <b>Ronny Knepple</b>	<b>Full name of sole or first inventor</b> <b>Ronny Knepple</b>
 Unterschrift des Erfinders	 Inventor's signature
<b>12/23/99</b> Date	 Date
<b>Wohnsitz</b> <b>D-88662 Überlingen, Germany</b>	<b>Residence</b> <b>D-88662 Überlingen, Germany</b>
<b>Staatsangehörigkeit</b> <b>Germany</b>	<b>Citizenship</b> <b>Germany</b>
<b>Postanschrift</b> <b>Dorfhalde 18</b> <b>D-88662 Überlingen, Germany</b>	<b>Post Office Address</b> <b>Dorfhalde 18</b> <b>D-88662 Überlingen, Germany</b>
<b>Vor- und Zuname des zweiten Miterfinders (falls zutreffend)</b> <b>Hubert Riegger</b>	<b>Full name of second joint inventor, if any</b> <b>Hubert Riegger</b>
 Unterschrift des zweiten Erfinders	 Second Inventor's signature
<b>12/28/99</b> Date	 Date
<b>Wohnsitz</b> <b>D-88628 Salem, Germany</b>	<b>Residence</b> <b>D-88628 Salem, Germany</b>
<b>Staatsangehörigkeit</b> <b>Germany</b>	<b>Citizenship</b> <b>Germany</b>
<b>Postanschrift</b> <b>Obere Kapellacker 12</b> <b>D-88628 Salem, Germany</b>	<b>Post Office Address</b> <b>Obere Kapellacker 12</b> <b>D-88628 Salem, Germany</b>

(Im Falle Dritter und weiterer Miterfinder sind die entsprechenden Informationen und Unterschriften hinzuzufügen.)

(Supply similar information and signature for third and subsequent joint inventors.)